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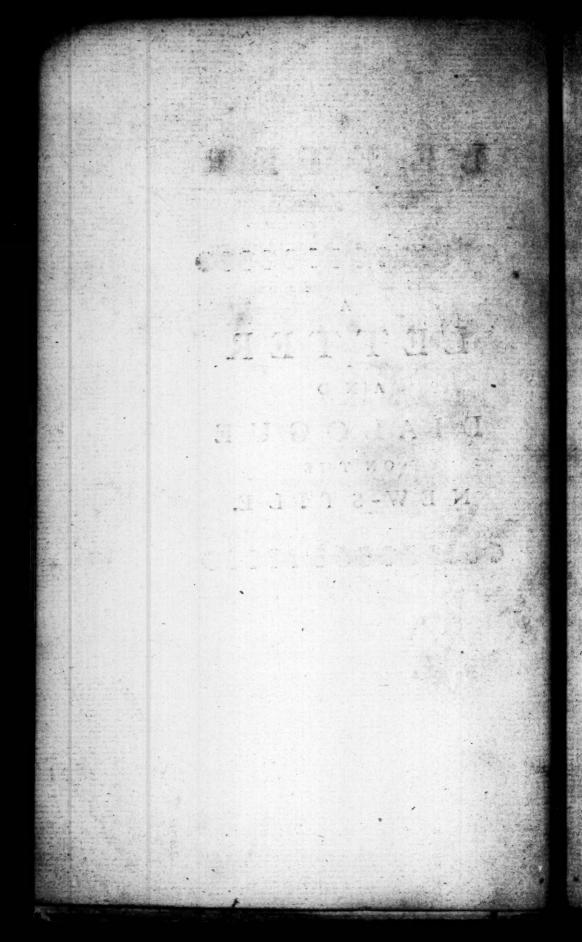
DIALOGUE

ONTHE

NEW-STILE.



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LETTER

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To a PERSON of

Scrupulous Conscience

About the TIMB of keeping

CHRIST MAS,

According to the

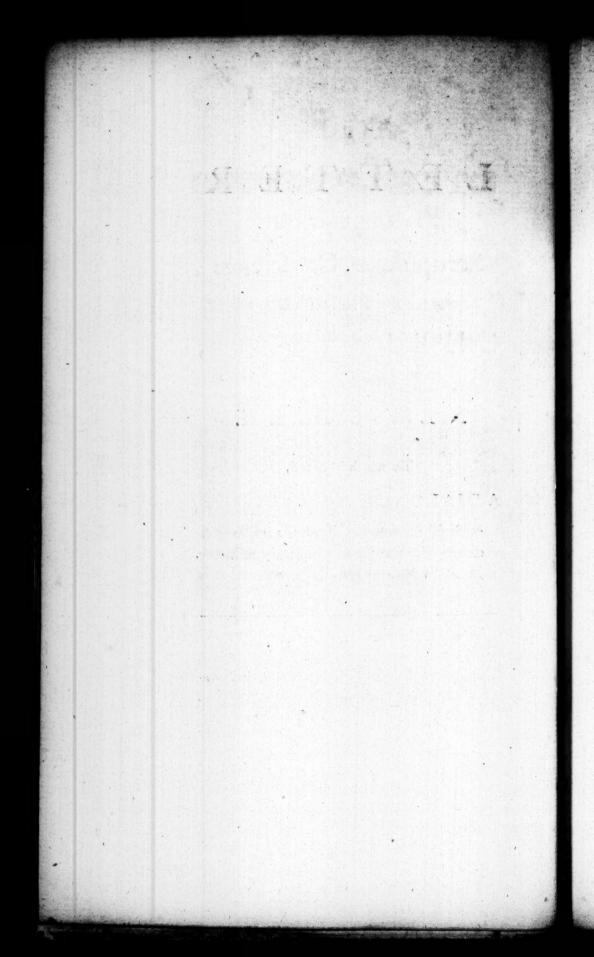
NEW-STILE.

To which is added,

A DIALOGUE between a CLERGY-MAN and his PARISHIONER, familiarly explaining the Reason and Expediency of the NEW-STILE.

LONDON:

Printed for R. BALDWIN, at the Rose, in Pater nosser-Row; and sold by Mr. Fletcher, in Oxford; and Mr. Merril, in Cambridge. M, DCC, LIII.





A LETTER to a person of scrupulous conscience, about the time of keeping Christmas, according to the New-Stile.

Good Neighbour,

OU feem to be uneafy in your mind, that you are order'd by act of parliament to keep Christmas eleven days sooner than usual; and you feem to have some scruple of conscience about the present national observance of it. But do you know, that if the ancient christians were right in settling the day of our Lord's nativity on the 25th of December, we were wrong in keeping it on the 25th of December, according to the Old-Stile? If they were right in settling it on the 25th of December, according to their stile, we shall be right.

right in keeping it on the 25th, according to our new stile?

This may at first fight appear somewhat strange to you. But in order to convince you of the truth hereof, let me first beg your attention to a few general observations, and then apply them.

Let us confider first, what portion of time a year, or a day is; how it is meafured out to us; and (as your scruples are of a religious kind) what account the

scripture gives us of this matter.

God almighty, the great creator, we know, hath appointed the sun to measure out certain seasons to us. His rising and setting bring on regular day and night. Thus we read Gen. i. 14. " And God said, it let there be lights in the surmament of the beaven, to divide the day from the night; And let them be for signs, and for seasons, and for days and years." In our distinctions of day and night we cannot well err. Our senses there will inevitably guide us: Whilst we have alternately light that constitutes the day, and darkness that distinguishes the night. The space of a day and a night, or of alternate light and dark-

nefs,

ness, maketh up, what is called a natural day. Thus the scripture faith, the evening, and the morning were the first day. This portion of time included in a natural day comprehends the space of 24 hours.

But suppose now, my good neighbour, that our country had by mistake, and different from the computation of other countries, taken in, for many years, twentyfive hours into their natural day, instead of twenty-four; would you not have thought, that they had been in the wrong; and that their way of reckoning ought to be alter'd? Or else would they not reckon the twenty-fifth hour of the first day at the fun-rifing of the fecond? And confequently would not the first hour of that second day begin an hour after the fun was risen? The next day would begin two hours after the fun was rifen, and fo on: till in the space of twelve days, the former computed day would continue till the funfetting of the next fucceeding one, and fo on; which would be abfurd. What confusion would hence arise in our computation of days!

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Suppose

Suppose again, that instead of * about twenty-nine days, some odd hours and minutes, we should take in thirty days for the periodical revolution of every moon; that is, into the space of time, which we reckon between new moon, and new moon; should we not foon be behind the moon? And should we not reckon that time only part of the wain of the old moon, in which the new moon had above a day begun her course? Should we not by this means be in the wrong about the new and full of every moon? And should we not in process of time come to reckon that the day of the new moon, on which the moon was really advanced to the full? What confufion would hence arise in the computation of moons!

Suppose now, that the error, which we have been before imagining in our computation of days, or moons, should really have been committed in our measure of years. This in reality bas been committed. The apparent course of the sun round the earth is our measure of a year. As, according to the book of holy writ above-quoted,

^{*} Twenty-nine days, 12 hours, 44 Minutes.

quoted, it was defigned by providence to be. But we have by means of the biffextile, or leap-year taken fome * minutes more into our account of the time of the fun's yearly course, than the fun takes in performing his course. Consequently the fun must be got again to that point of the heavens from whence he fet out, every year, fooner than we suppose him to be got thither, in the proportion of our account. Confequently by this account, we should be some minutes behind the sun in our beginning of every new year. The first year we should be in the proportion of eleven minutes behind: The fecond, eleven more, or two and twenty minutes: The third, eleven more, or three and thirty minutes; that is, above half an hour behind the fun, and fo on. Thefe minutes you fee, would foon swell into hours; and hours would grow into days.

This was really the case. From the time of the last reformation of the calendar, we were by the Old-stile got eleven days behind the sun. The shortest day would.

^{*} See this more fully and familiarly explained in the following dialogue.

would, by the fun's course, come long before it came by the account in the calendar, as it was then fettled. For at the time when that calendar was fettled, the shortest day really happened about the 22d of December; whereas it came to fall with us, before the alteration of Stile, about the 11th. In the same manner the longest day, by the fun's courfe, would come on fooner than it was fettled by that calendar. For whereas it fell in those days about the 22d of June, it was come to fall with us about the 11th. The feafons therefore and the calendar would not keep pace together, according to their first settlement. The fpring and autumn feafons would vary in like manner from that calendar.

Now if the longest and shortest days came with us eleven days sooner, than the calendar settled by the ancient christians supposed them to be arrived, Christmas day, or the day when we should keep Christmas, would come eleven days sooner than was supposed by that calendar. Consequently we should by our almanack, according to Old-Stile, be eleven days too late in our keeping of Christmas, i.e. ele-

wen days later than the ancient christians were. Foreign nations saw this; and they corrected their Stile. Why should we obstinately continue in the wrong; and keep Christmas after other nations had kept theirs; when we knew ourselves to be in the wrong? Especially as the correction was so easy, by only leaving out once the nomination of eleven days out of the almanack.

If you think, that our Lord was born on the 25th of December; or that the first christians did right in settling his nativity on that day, why should you be desirous of keeping it on the day, when they supposed he was not born? Why should you be desirous of keeping it on the day, which according to their reckoning would have been the fifth of January? For the New-Stile only brings our almanack to be conformable to what theirs was; our Christmas day to coincide with theirs; our new years day to agree with theirs; and with that of most other modern christian nations.

You see then, good neighbour, if you are religiously scrupulous about this point of time, and desirous to keep Christmas

the same portion of the year, when the ancient christians, and they, who first fettled your calendar, kept it, you cannot now keep it right, if you keep it according to the Old-Stile. Because by that Stile Christmas will fall eleven days later, than in the times of the ancient christians; and confequently later than the day, when those, by whom you would be guided, appointed it to be kept. For the new year had been begun eleven days, when we reckoned the last of the old: Or, in other words, the fun was come to that part of the heavens, from whence his new year was to begin, eleven days before we fupposed him to be got thither. Therefore in our reckoning we were got eleven days behind the fun. The Shadow of our dial was, in reality, gone backward, eleven days: as if we counted it but one o'clock in the morning, when in reality it was twelve at noon. We reckoned that but the first day of January, which was in reality the twelfth: Confequently we reckoned that but the twenty-fifth of December which was really the fifth of January, and which ought to be fo esteemed. You

You see from hence, good neighbour, that according to the Old-Stile, you kept Christmas eleven days later than the ancient christians kept it! The 25th of December came eleven days later than it did in their time. What then had you to do, but to leave out the naming of eleven days, out of some part of your year, in order to set you right? This was no more than setting your clock forward when it was too slow; or setting the hand at once to the right hour, passing over the intermediate sigures.

Would you willingly have the hand of your clock stand at four or five in the morning, when it ought to ftand at twelve at noon? Or should you think it any crime to move it forwards? Why then should you fuffer your almanack to point out to you only the first day of the month, when it ought to point to you the twelfth? Or is it any fin to advance the calendar forwards to the true time, by leaving out the nomination of fo many days? Which is no more, in effect, than moving the hand of your clock at once over fo many figures, when you knew that it pointed wrong. This is no more than to bring your calendar,

dar, and the hand of your clock together to true time. This will bring you to the time of celebrating our Lord's nativity, when the ancient christians solemnized it; if that is the point you aim at. This will bring you to the right time of celebrating it, it they were right in fixing it to the 25th of December.

I only fay if they were right: For I will not venture to affirm, that the ancient christians were infallibly certain of the day; or that our Lord was indubitably born upon that day. No: they came as near the time, as they could; and were fatisfied with fuch observance. If you would approach as near as you can, in conformity to their appointment, you must correct your Stile; that is, you must follow the New-Stile; or you will not keep your Christmas when they did; and when they intended that christians should keep it. Your clock, or, in other words, your calendar is now fet forward by the New-Stile: Your time will now go on regularly again, with that of other nations.

Besides, you never kept Christmas day precisely on the same day, for four years together,

together, during the authority of the Old-Stile: which perhaps you may not be aware of. For before this alteration of the Stile, Christmas day in every leap-year was kept a day later than in the three preceding years; an additional day being inferted in the end of February: Confequently the first day of March, and every following day, of course Christmas day being put a day backwarder in that year, than in the three foregoing ones. You fee then that before this alteration of Stile, you did not keep Christmas day on the same day of the year constantly four years together. if you thought it no harm to remove it one day, for the fake of bringing it near to true time; why should you think it any to remove it forward for once eleven days, for the fake of bringing it still nearer to true time? What has been faid of Christmas may with the fame reason be applied to all the fixt immoveable feafts, which will be equally affected thereby. By the new calendar the moveable feafts likewife, as that of Easter, and the like, are brought nearer to true time; nearer to the time appointed for the keeping of Easter, among the ancient

ancient christians, by the famous council of Nice.

Let me here observe, that it was probably the intention of the ancient christians, when they fixt the days of our stated festivals, to contrive, that some of the greater feasts should fall in with some remarkable periods relative to the feafons, as they stood marked in the Julian calendar. For thus we find, that as they supposed our Lord to be born about that feason of the year when the days are shortest, they fixt the festival of his nativity on the 25th of December; which was precifely marked as the shortest day in the ancient Julian calendar, fettled by Julius Cæfar. Confequently the day of Annunciation, which we call Lady-day, would naturally fall on the period of equal day and night in the fpring feafon, which we find exactly fixt to the 25th of March in the old Julian calendar. The festival of St. John the Baptift, the forerunner of our Lord, was fixt precifely to that, which was pointed out as the longest day, in the same calendar.

Christmas day then was probably intended to be kept on the shortest day,

which

which by the Julian calendar was fixt to the 25th of December, though it really fell at the time of the council of Nice about the 22d. You perceive then how far we were deviated, by the Old Stile, from the time on which the ancient chriftians supposed our Lord to be born. They fixt his nativity on the supposed shortest day: The shortest day at the time of the council of Nice really fell about the 22d, however they might comply with the Julian calendar. Whereas, according to the Old-Stile, in our days, it was come to fall about the 11th. Confequently we kept Christmas so many days, as intervened between their shortest day and ours, later than they intended it should be kept; which would be eleven days at leaft.

Consider impartially what has been said! Be not positive against the nature of things! But pay some deference to the judgment of those who do, and who ought to understand the nature of the sun's course, the true measure of time, and of a year, better than those who have not been conversant in such studies.

If in short, good neighbour, your objections to the New Stile, or the present time of keeping Christmas, proceed upon religious motives, should you not rather be thankful to that noble, learned, and ingenious Lord*, who was principally instrumental in contriving a method to set you right in time, than unreasonably adhere to those, who, against the course of nature, against ancient observance, and present authority, would obstinately keep you wrong?

I wish well to your momentous interests in all respects, temporal and religious; both those which relate to the time which now is, and that future part of time, which shall no more be measured by the sun's course; being with great sincerity,

Your most faithful,

and affectionate Servant, &c.

^{*} The Right Hon. the Earl of Macclesfield,

A dialogue between a clergyman and his parishioner, familiarly explaining the reason and expediency of the New-Stile.

Par. I Should be glad, Sir, to be informed by you, what is the meaning of the New-Stile; or the reason for the alteration of Stile?

Cler. The intention is to bring our year forward to true time, according to the fun's yearly course, as we compute our day by the sun's daily course; that we may compute our time according to the true measure of a year, and as most other christian nations, throughout Europe, now compute theirs.

Par. What is the true measure of a year? Cler. A year is that space of time, which the sun takes in moving apparently round the earth from one point of the heavens, till it returns to the same point again.

Par.

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Par. In what length of time is this revolution performed?

Cler. In 365 days, 5 hours, and 49 minutes, that is, almost 365 days, and 6 hours. But as we cannot well measure a year in common use, but by whole days, therefore the 5 hours, and 49 minutes are not taken into the reckoning of a common civil year.

Par. What would be the confequence of this omission, if no regard at all were ever taken of the remaining five hours, and 49 minutes?

Cler. The odd five hours, and 49 minutes, which are nearly fix hours, wanting only eleven minutes, being conftantly omitted in the reckoning, would in four years amount almost to a whole day: for four times fix hours is equal to 24 hours, or a natural day: Confequently at that rate we should every four years get a day before the sun; that is, as we reckoned less time by six hours for the sun's yearly course, than he really took, we should every four years begin our new year a whole day before the sun. In eight years, two days before the sun; in 32 years, eight days

days before the sun; in 64 years, 16 days before the sun; and in 128 years, above a month before the sun, and so on: which in process of years would make vast confusion in our computation of seasons, and carry at length December into summer.

Par. What inconveniences would arise from hence?

Cler. One main end and use of a regular calendar is, that it may point out to us, at first view, the season of the year, according to the fun's courfe, by the respective day of the month: that the husbandman by the fight of his almanack may know when to begin his labours in the field, to fow in time, that he may reap in feafon: And the mariner may know the proper time to fet fail for fea according to the course of his intended voyage. But if the calendar vary from the fun's real course, which it was intended in effect to point out, the use thereof will be lost: It will become deceitful, instead of being serviceable and very convenient to man. Many conveniences to the farmer depend upon an agreement between the calendar and the If they come to differ by any confeafon. fiderable

fiderable time, the Fair, for instance, may be appointed, by the stated day in the almanack, for the fale of his wool, before his sheep are fit to be sheared: A Fair may be appointed for the fale of fruits before they are fit to be gathered; or for cheese. or cattle, before they are come to their perfection, fit for fale. Therefore you may observe, it is provided, upon the present alteration of Stile, that the days of many fairs should be changed in proportion to that alteration. But a perpetual variation of the times of fairs, in every town, for different fruits, and produce of the earth, according to the variation of the almanack from the fun's courfe, would have been very troublesome. These inconveniences, I fay, would foon have arisen, if no notice had been taken of the five hours and 49 minutes, to compleat the time of the fun's course, in the measure of a year.

Par. What was done to fet this matter right?

Cler. Why, finding that the odd hours and minutes would thus in four years make up almost a whole day; we in the common reckoning of our calendar, accord-

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ing to Old-Stile, supposed them to do so; reckoning them roundly full fix hours every year, and fo making the common year to confift of 365 days, we every fourth year added a day at the end of February, affigning to that month 29 days, instead of 28; and fo making that year to confift of 366 days. This in our almanacks is called biffextile year, from a word of Latin derivation; and in our common English language, leap-year.

Par. But do you not then in this case reckon every year eleven minutes too much? For just now you said, that the true folar year confifted only of 365 days, 5 hours, and 49 minutes; whereas at prefent by this additional day, every leap-year, we suppose it to confist of 365 days, 6 hours, in full round reckoning: do we not then every year take eleven minutes too much into our account?

Cler. You are very right: this was really the case; and this made the necessity of altering our Stile. For though the introduction of leap year went a good way towards bringing the civil year, and that of the fun's course to agree together, yet D 2

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in process of time, and especially as the study of astronomy has been more improved, imperfections were still found, even after this amendment, and such as being uncorrected would render us liable to great inconveniences.

Par. Pray give me fome clear account of this matter, that I may have a right notion of it; for at prefent I do not conceive it so perfectly as I could wish.

Cler. I will endeavour to do fo, as I think it my duty. Our year then, by means of the leap-year, you fay, would be too long by eleven minutes. Thefe confrantly repeated minutes would in three years amount to above half an hour: In fix years to above an hour; and in about 130 years to a whole day. This you will fee by the common rule of multiplication of eleven minutes into any number of years: Confequently in about 130 years we should begin our new year a day too late; in about 260 years, two days too late, and fo on: And fince the reformation of our calendar, by the publick council of Nice, above 1400 years ago, we were become eleven days too late in the beginning of our new year by the Old-Stile; and confequently in our celebration of the fixt festivals of Christmas, and the like; and were going on into further error.

Par. But where would be the private, or national inconvenience, if the Stile had not been altered?

Cler. We were certainly wrong, and were going on to be more fo in our computation of feafons. For as any fixt day of the month in the calendar, without the infertion of leap-year, would have come on too soon in respect to the seasons, the calendar year being then too fhort; fo after the introduction of leap-year, by the Old-Stile; it would have come on too late, the calendar year being then too long. The fame inconveniences confequently would have enfued as in the forementioned case, from a difagreement between the calendar and the feafons; only in a longer space of time: And as the variation would have come on more flowly, it would have been less fenfibly perceived, than in the former case. Yet it had proceeded fo far, as to be very manifeftly perceived: Great inconveniences began to arife. A very material one, with with respect to ourselves was, that as most foreign European nations had resormed their Stile, we differed from them eleven days, which would create frequent vast confusion and disadvantages to our merchants in their accounts, difficulties in settling the dates of compacts, sales, purchases, use of goods, interest of money lent, treaties, and other matters between persons of different nations.

Par. I begin now to fee the use and reason of introducing the New-Stile into our own kingdom by publick authority.

Cler. The defign was, I fay, to remedy these inconveniencies, and to prevent greater, by leaving out only for once the naming of eleven days out of our almanack, in the year 1752, and providing in a proper manner by a due regulation of our calendar for the future, only as to the insertion or omission of the single additional day of leap-year, after the rate of once in about 130 years, that we may not be liable to the like mistake in time again: So that our calendar will now keep pace with that of other christian nations: We shall compute our time with them; and keep

keep our festivals with them; be immediately acquainted with the dates of their transactions, and less subject to mistakes in our traffick with them; our fairs will now return regularly with their respective seasons, upon the same days of the month.

Par. I thank you, fir, for this inftruction, and am now fatisfied that the parliament did very right in altering the Stile; if for no other reason, yet especially as we are a trading nation, and the prosperity of the whole kingdom, of the farmer, as well as of the citizen, depends upon the ease and convenience of traffick.

FINIS.

